

# Best Management Practices

MISSOURI DEPARTMENT OF CONSERVATION



## Decurrent False Aster

*Boltonia decurrens*

**Common name** • Decurrent False Aster

**Scientific name** • *Boltonia decurrens*

**Federal status** • Threatened

**State status** • Endangered

### Ecology

Decurrent false aster is a big river floodplain species that grows in wetlands and on the borders of marshes, lakes, oxbows, and sloughs. It also may be found in old fields, roadsides, agricultural fields, and on levees. It favors sites characterized by moist soil and regular disturbance, preferably periodic flooding, which maintains open areas with high light levels. Today it is found in areas where succession is prevented and sunlight is allowed to reach the seedlings. It is a perennial plant that blooms from August through October. Seed dispersal is achieved primarily by floodwater. Decurrent false aster once occurred in almost contiguous populations in a 400 km band between LaSalle, Illinois and St. Louis, Missouri, within the Illinois and Mississippi River floodplains. In Missouri, decurrent false aster is presently known to occur only in the eastern one-half of St. Charles County in areas subject to Mississippi River flooding.

### Reasons for Decline

Populations of decurrent false aster declined as floodplain wetlands were converted for agricultural use. It is currently threatened by flood-control measures, agricultural use of marginal river-bottom land, increased siltation of floodwater, herbicide use for weed control, and construction. Changes in flooding regimes which allow succession of habitats to shade-producing species are also a threat.

### Specific Recommendations

Projects in areas where decurrent false aster is likely to occur should include a survey during the August to October flowering period to determine if the species is present.

→ Maintain open, moist, early successional habitat that receives periodic inundation from Mississippi river floodwater. Established populations need newly-disturbed areas in which to spread.

→ Avoid general application of non-specific herbicides. Monocot-specific herbicides can be spot-applied with minimal threat to decurrent false aster.

→ Resurvey following significant flooding as decurrent false aster populations are frequently redistributed by flood waters.

→ Use cutting, prescribed burns, or herbicides to reduce colonization of sites by cottonwoods, willows, and other wetland woody species.

→ Low, wet areas of agricultural fields occupied by decurrent false aster should be cultivated only with adequate frequency to prevent succession to heavy shade-producing species, perhaps every third year.

→ Avoid any changes to drainage patterns that would lessen accessibility of sites to Mississippi river flood waters.

→ Avoid mowing of decurrent false aster populations the May through October growing period.

### Information Contacts

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### Disclaimer

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